IBM Software Group

IBM WebSphere® CloudBurst

Installation and initial setup

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This presentation will discuss the IBM CloudBurst initial installation and setup.

Agenda

- Overview of the CloudBurst appliance

- Setting up the CloudBurst appliance

- Bringing up the CloudBurst interface

- Appliance and Profile configuration

- Summary

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This presentation will discuss the overview of the cloudburst appliance, the initial setup of the appliance using a serial connection, bringing up the cloudburst administrative console, and appliance and profile settings in the CloudBurst administrative console.

Section

CloudBurst appliance overview

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This section will discuss a general overview of the CloudBurst appliance.

CloudBurst appliance physical attributes

- CloudBurst ships as an appliance
- 1U mountable appliance
- Installs onto a standard 19in (48.26cm) rack with a minimum of 25in (63.5cm) of depth
- Requires front and rear mounting support
- Standard clearance for appliance operation required

The CloudBurst appliance is a 1U mountable appliance that installs on a standard rack mount.

The hardware appliance requires front and rear mounting support with standard clearance for appliance operation.

CloudBurst appliance

- CloudBurst appliance included hardware:
  - ▶ Power cables
  - ▶ Serial cable
  - ▶ Rack rails

- CloudBurst appliance interface:
  - ▶ Serial port for initial configuration
  - ▶ Four Ethernet ports

- Ethernet ports and serial port reside on the front of the appliance

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The cloudburst appliance has all the required hardware included with it in order to install it onto the rack.

The appliance also comes with a serial cable that is used for initial configuration by connecting to a terminal emulator and power cables.

Section

Setting up the CloudBurst appliance

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This section will discuss setting up the CloudBurst appliance.

Setting up the CloudBurst appliance

- Initial setup of the appliance includes:
  - ▶ Secure the appliance in the rack using the supplied hardware
  - ▶ Connect the appliance to an AC power source (both power supply modules)
  - ▶ Connect the MGMT port to the network
  - ▶ Establish a connection to the CONSOLE connector from a system running terminal emulation software using the supplied serial cable
  - ▶ Power on the appliance
  - ▶ Initial firmware configuration

Installation and initial setup

To initially set up the CloudBurst appliance, the appliance should first be installed on the rack using the supplied hardware.

Once the appliance has been secured to the rack, the Ethernet port labeled MGMT can be connected to the local area network using an Ethernet cable.

The power cords can then be connected to the appliance and plugged into a power source.

Once the appliance has been plugged in, the serial cable can be secured to the serial port on the CloudBurst appliance. The other end of the serial connection cable can be connected to a system that is running terminal emulation software.

The appliance can then be powered on and initialized using the terminal emulation connection.

Initial firmware configuration

- Using the serial connection, use the terminal to initially configure networking for the appliance:
  - ▸ Acceptance of the license agreement
  - ▸ Provide super user password
  - ▸ Configure Ethernet port MGMT
    - ▪ IP address
    - ▪ Subnet mask in CIDR format
    - ▪ Default gateway
    - ▪ Physical mode of the Ethernet interface
- Serial connection can be used at any time to re-configure most of this information

```
Enter the new password for the user "admin":
Re-enter the password:
Please wait while the admin password is set in the database ...

Configure ethernet port MGT...
Enter the IP address. (Default: 9.42.132.92):
Enter the subnet mask in CIDR format. (Default: 25):
Enter the Default Gateway (Default: 9.42.132.1):
Select the Physical Mode. (Default: Auto )
1) Auto
2) 100baseTx-FD
3) 100baseTx-HD
4) 10baseT-FD
5) 10baseT-HD
6) 1000baseTx-FD
```

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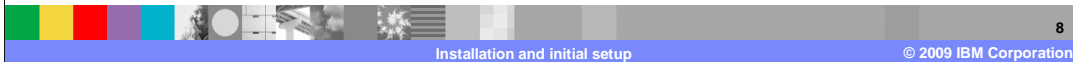
When the CloudBurst appliance is first connected to a machine running a terminal emulator, the administrator performing the initial setup will have to accept a license agreement and language preference. They can then set the super user password. That super user password they set will become the administrator password for initial login to the CloudBurst administrative Web console after the appliance is made available on the network.

The next step is to configure the Ethernet port labeled MGMT. The administrator will provide an IP address for the Ethernet appliance, a subnet mask in CIDR format, a default gateway, and set the physical mode of the interface, for example 10 base T.

The serial connection can be used at any time to reconfigure most of this information, but the super user password can only be set once using the serial cable interface. Also, on subsequent connections using the serial cable, you will not be required to accept the license agreement.

Section

Bringing up the CloudBurst interface

This section will discuss bringing up the cloudburst Web interface.

Bringing up the CloudBurst interface

- CloudBurst appliance is administered through a Web interface using a Mozilla Firefox V3.0 browser

- Accessed using the port information defined during the appliance initialization.
  - Example https://myCloudBurst.ibm.com

- Log in using your administrator user ID and password that you created during the initial firmware configuration
  - User ID: "admin" (created by default)
  - Password: ${USER_DEFINED}

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After the cloudburst appliance has been initially configured by the administrator using the serial cable connection, the appliance should be available on the local network at the IP address that it was assigned. The administrative console can then be brought up using a computer with Firefox three browser that is on the network.

A user with username 'admin' is available by default, and the password that was set during serial connection setup is the password used for that user name.

Once the administrator user has logged in for the first time, some initial appliance settings can be set.
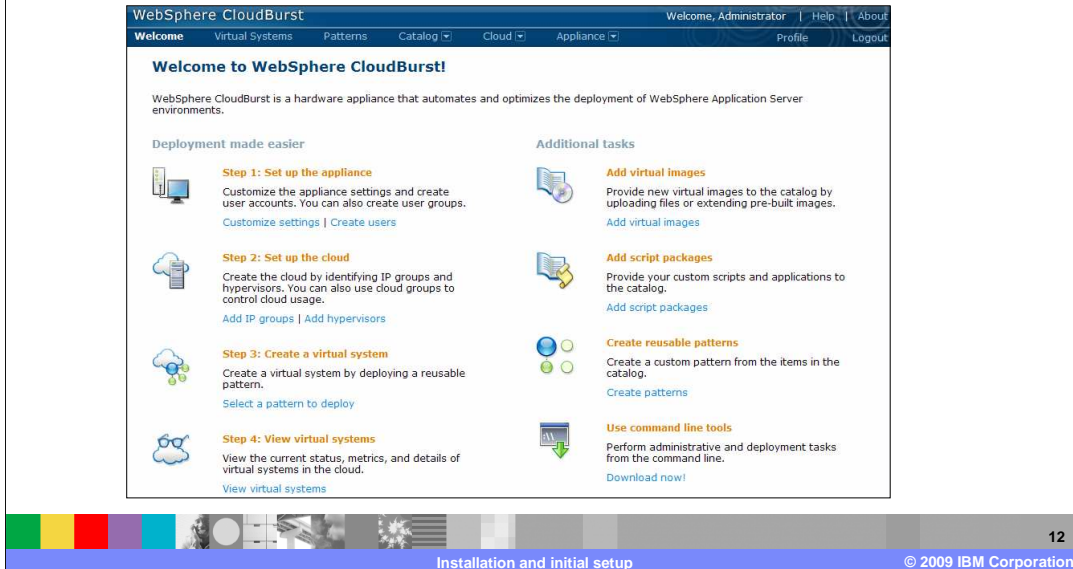
Section

Appliance and profile settings

This section will discuss the Appliance settings and profile configuration pages of the CloudBurst administrative console.

Welcome screen

- Default page presented at log in to the CloudBurst administrative console

The CloudBurst welcome screen has a list of steps to help new users get CloudBurst up and running quickly.

There are links associated with each setup step that help users navigate to the appropriate pages in the CloudBurst console.

Each of the links that reside in the welcome screen navigate to pages that are available from the hyperlink tabs at the top of the console screen;

to configure appliance settings, to configure cloud resources, and work with patterns and virtual systems.

Profile page of administrative interface

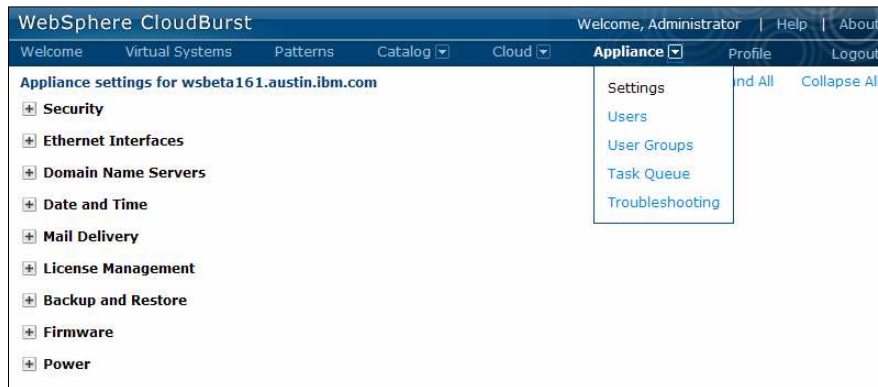- Profile page displays information specific to the user currently logged in
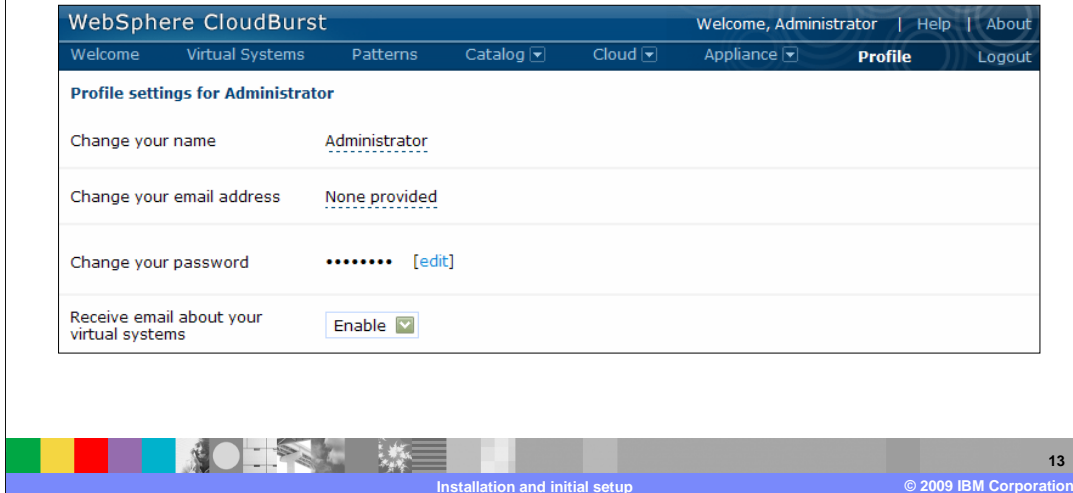
The profile screen is available by clicking the Profile link at the top right side of the CloudBurst console screen.

The profile page allows you to change your password, set an e-mail address, change your name, and toggle the setting on e-mail notification.

If you select enable for "Receive e-mail about your virtual systems" you will receive e-mails to the provided e-mail address when virtual systems that you are deploying become available.

The appliance settings page has several available configuration sections to configure the CloudBurst appliance.

There are several options you can configure, including security configuration, Ethernet configuration, and domain name servers.

Other configurable options include the date and time settings for the appliance, mail delivery settings, license management for the appliance and backup and restore of appliance settings. There are sections for configuring firmware management, and control of the power of the appliance where you can power off or restart the appliance.

You will take a closer look at each of the available appliance settings in the next slides.

In the security settings section of the Appliance settings page you can configure some security settings.

You can allow users to create their own user accounts from the login page by enabling the "Allow new users to create their own accounts" setting.

You can also set whether the administrator password can be reset from the serial console here.

LDAP can be used with the CloudBurst appliance, and you can enable the use of LDAP in this security section of the appliance settings page.

The JNDI provider URL, JNDI base domain name, and search filter can be set here under External Authentication.

Ethernet interfaces

- The network interfaces on the appliance

- Enabled check box indicates if Ethernet interface is enabled

- IP address and network mask associated with the interface

Ethernet Interfaces

	Interface	IP address/mask	Default gateway	MTU	Mode	
☑	eth0	None provided	None provided	1500	Auto	▼
☑	eth1	None provided	None provided	1500	Auto	▼
☑	eth2	172.16.15.189/21	None provided	1500	Auto	▼
☑	mgmt	9.42.132.84/25	9.42.132.1	1500	Auto	▼

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The Ethernet interface configuration section of the appliance settings page allows you to work with the settings for the four Ethernet interfaces that the CloudBurst appliance has.

You can enable or disable any of the Ethernet interfaces by checking or un-checking the check box beside the corresponding interface description that you want to enable or disable.

You can provide an IP address and a default gateway separately to each interface. The MTU settings and the mode of the interface can also be modified here.

Domain name server

- Domain name servers associated with the CloudBurst appliance can be:
  - Added
  - Edited
  - Deleted

Domain Name Servers

9.42.106.3 ↑↓ ✖

Click to add

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The Domain name server configuration section of the appliance settings page allows you to add and change domain name server settings for the CloudBurst appliance.

Domain name server addresses can be added, modified, and deleted from this section of the settings page.

You can also adjust the order of the domain name servers in the list by dragging the arrow icon beside the domain name server address that you want to adjust the order of in the list.

Date and time

- NTP server addresses can be set and adjusted here
- Time zone configuration
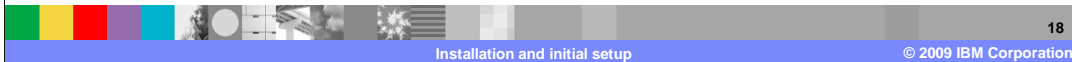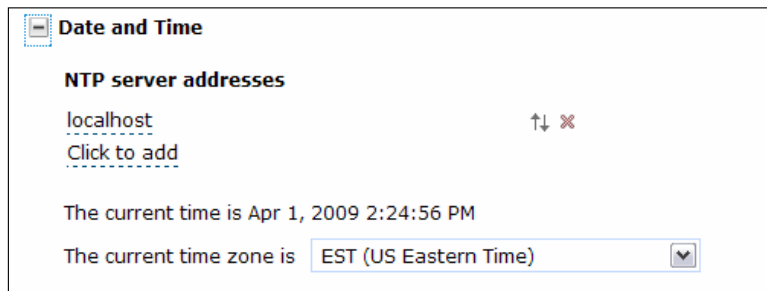
In the date and time section of the appliance settings page you can adjust the date and time settings of the CloudBurst appliance.

You can add, modify, and remove addresses to NTP servers to synch the time of the CloudBurst appliance.

The current time setting on the appliance is displayed as well.

You can change the time zone that the CloudBurst appliance resides in by selecting the appropriate geographic time zone for the appliance from the time zone drop down menu.

Mail delivery

- CloudBurst users can be notified of CloudBurst updates
  - User ID creations, password resets, virtual system creations
- SMTP settings for mail server configuration
- Reply to address for CloudBurst appliance notification e-mails

Mail Delivery

SMTP server	None provided
Reply-to address	Use system administrator's address

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The mail delivery section of the appliance settings page allows administrators to set the e-mail settings for the CloudBurst appliance.

The SMTP server that the CloudBurst appliance should connect to in order to send e-mails can be specified or modified here.

A reply to address can also be set. This reply to address is the reply to address that is set on any e-mails that the CloudBurst appliance sends out for notification of CloudBurst events to users.

License management

- Track process or value units
- Set server name hosting the IBM License Metric Tool
- Set the scan group

License Management

☐ Track processor value units (PVUs) with IBM License Metric Tool

Server name   None provided

Scan group   None provided

The license management section of the appliance settings page allows you to configure the tracking of processor value units for the CloudBurst appliance.

You must have a server running the IBM License Metric Tool in order to enable this setting. You can set the name of the server running the IBM License Metric Tool here, and the scan group that the tool is using to track the usage of the CloudBurst appliance.

Backup and restore

- Find a place to store your backup
- Secure your backups
  - ▸ Have CloudBurst generate a keypair
  - ▸ Upload your own certificate
- Schedule a new backup
- Restore from a backup

Backup and Restore

Step 1: Find a place to store your backups
This step is required. You must specify where backups will be stored.
Host: None provided
Path: None provided
User name: None provided
Password: •••••••• [edit]

⚠ You must provide a host name.

Step 2: Secure your backups
This step is required. You must generate a keypair or provide your own certificate.

Generate your own keypair   **Upload your own certificate**

[New password]   [Browse...]

[Verify password]   [Upload]

[Generate]

Step 3: Schedule a new backup
Select a date and time to create the backup (the default is right now).

[Thursday, April 16, 2009]   [2:38:27 PM]
[Schedule]

Step 4: Restore from a backup
There are no available backups right now.

The backup and restore section of the appliance settings page allows you to create backups of your CloudBurst appliance settings and store them on a remote server.

You can select the location of a remote server to store your backups to. If you have made a backup, you can restore your CloudBurst appliance settings with the backup file. You can access the backup by selecting Step 4: Restore from a backup hyperlink and choose the backup file you want to use to restore the appliance settings.

Optionally, you can choose to encrypt your backups using a certificate that you provide, or you can generate a key pair using a password that you set while you secure your backups.

You can schedule backups to run at a specified date and time from the "schedule a new backup" section. By default when you schedule a new backup it will run immediately.

Firmware settings

- Current firmware installed is shown
- Firmware can be upgraded

Firmware

The current firmware version is WebSphere CloudBurst 1.0.0.1-12374

Browse...

Upgrade

In the firmware section of the appliance settings page you can work with the firmware that you have installed on the CloudBurst appliance.

You can see the current version of firmware that is installed on the appliance, and choose to upgrade that firmware to a new version.

There is a browse dialog box that you can use to select the new firmware file that you want to upgrade to, then select the upgrade button to apply the upgrade using the file that you select.

Power administration

- CloudBurst UI has the capability to restart and power off the appliance
  - ▶ Restart appliance link
  - ▶ Shutdown the appliance link

⊟ **Power**

↻ Restart the appliance   ⓘ Shut down the appliance
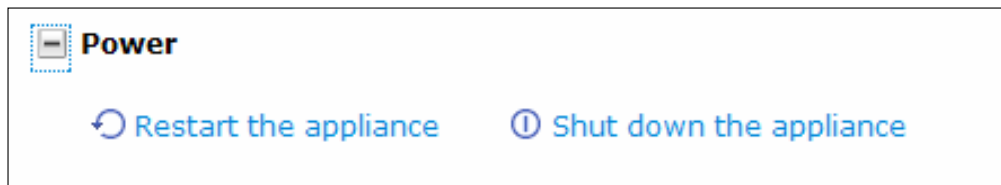
The power section of the appliance settings page has two options related to the power of the appliance.

You can restart the appliance here, or you can choose to power down the appliance.

Section

Summary

This section will summarize the initial setup presentation.

Summary

- Hardware included with CloudBurst appliance

- Initial network configuration using terminal emulation and serial cable connection

- Firefox V3.0 Web interface accessible after initial configuration

- Administration of user information using the Profile tab

- Administration of the appliance settings on the Appliance settings page

Installation and initial setup

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This presentation has discussed the CloudBurst appliance initial setup and configuration.

You have explored the topics of initial setup, accessing the administrative console, profile configuration, and CloudBurst appliance settings.

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